

filed June 14, 2005. Prior to scheduling an interview to discuss objective evidence of commercial success and other related issues, the Office mailed the outstanding Office Action on August 22, 2005. A personal interview was held September 12, 2005. Applicants' representatives have had several telephone conversations with the Examiner subsequent to the interview. This response summarizes the interview and the subsequent telephone calls with the Examiner and fully responds to the outstanding rejections.

#### **REQUEST FOR EXTENSION OF TIME**

Applicants respectfully request a one-month extension of time under 37 C.F.R. § 1.136(a) for responding to the Office Action mailed on August 22, 2005, in the above-captioned patent application. Accordingly, it is respectfully requested that the time for response be extended up to and including December 22, 2005. A check in the amount of \$60.00 is attached to cover the one-month extension of time fee for a small entity. In the event of any variance between the amount enclosed and the fees determined by the U.S. Patent and Trademark Office, please charge or credit any such variance to the undersigned's Deposit Account No. 50-0206.

#### **INTERVIEW SUMMARY**

As noted above, applicants requested a personal interview to discuss the declarations submitted to demonstrate commercial success. The outstanding Office Action was mailed immediately prior to scheduling the interview. The Office Action addresses the declaration by asserting that the facts set forth in the declarations do not have a direct connection with the claimed invention.

#### **SUMMARY OF THE INTERVIEW**

The interview was held September 12, 2005. At the interview, John Lair, co-founder and vice-president for marketing of Radeum, and Randy Bailey, vice-president for federal and military sales of Radeum (doing business as Freelinc), demonstrated the FreeMotion 200 wireless headset and discussed the establishment of Radeum as a successful nascent business. Applicants noted that the FreeMotion 200 headset is an entirely wireless headset including a push-to-talk switch on the headset. It was demonstrated that the FreeMotion 200 headset includes the capability to wirelessly transmit a signal from the headset to a two-way radio that is effective to cause the two-way radio to enter a transmit mode. It was agreed at the interview that the submitted declarations addressing the success of the FreeMotion 200 product do have a direct

connection to the invention as claimed, for example by claim 1. Accordingly, Examiner Cai and his supervisor, Examiner Joseph Feild, agreed that to properly apply the standard of patentability enunciated in *Graham v. John Deere*, 383 U.S. 1, 148 U.S.P.Q. 459 (1966), the evidence of commercial success set forth by applicants must be considered as an integral part of the proper analysis under 35 U.S.C. § 103.

Applicants set forth the series of events from the invention of the wireless headset with a push-to-talk switch by the applicants, through the founding of Radeum to bring the invention to the marketplace, to raising capital, designing a commercial embodiment of the invention, demonstrating the FreeMotion 200 product, beginning production, and taking orders for the FreeMotion 200 product. Applicants argued that it would have been impossible to have successfully raised capital and launched the Radeum company if the invention on which the business was founded was obvious to one of skill in the art. Applicants noted that their primary customers are in the law enforcement and military fields. Applicants further noted their customers were impressed with the FreeMotion 200 product and were enthusiastic to obtain the FreeMotion 200 product. Significantly, the customers stated reasons for their enthusiasm was that the FreeMotion 200 product was ideal for their needs and that there is and has been no other such product.

In summary, applicants set forth the success in establishing the Radeum business and argued that this success demonstrates that the invention on which the business was founded would not have been obvious. Applicants queried what further evidence should be submitted to fully establish Radeum success with the claimed subject matter. The Examiner's supervisor acknowledged that the statements from Radeum's customers were significant. The statements were most significant where 1) the statements were from prominent customers in the law enforcement and military fields (thus of skill in the art), and 2) the statements clearly set forth that the customer had not seen any other wireless headsets with push-to-talk switches in the marketplace. Applicants offered to obtain further such statements from customers to reinforce the showing of commercial success and queried what form the Examiner would prefer to receive such statements. The Examiner and his supervisor acknowledged that they do not frequently analyze evidence of commercial success. It was agreed that the applicants would gather further evidence and provide such evidence informally to the Examiner. The Examiner in turn would consult with specialists within the Office regarding the best form and content for further

declarations regarding Radeum and the FreeMotion 200 product that would best demonstrate on the record the success of the invention.

SUMMARY OF THE ACTIVITIES SUBSEQUENT TO THE INTERVIEW

On September 23, 2005, applicants emailed the Examiner and his supervisor nine further letters and emails that Radeum personnel received from individuals in the law enforcement and radio communications industries. The Examiner's supervisor acknowledged receipt and indicated that he would review the material. Subsequently, applicants' representative and the Examiner conducted a number of telephone calls in which the applicants' representative inquired into the status of the review. Applicants did not further discuss the material with the Examiner's supervisor. However, over the course of the telephone conversations with the Examiner the following positions of the Examiner emerged.

First, the Examiner noted that the FreeMotion 200 headset demonstrated at the interview has several features that are not set forth in the claims. The Examiner urged that the most expedient method of obtaining patent protection for the FreeMotion 200 product would be to narrow the independent claims to include such features. Applicants noted that a number of features of the FreeMotion 200 are related to design choices made after this application was filed. Accordingly, applicants have filed a continuation-in-part application describing the additional features and including more narrow independent claims.

Second, the Examiner stated that he would be applying anticipatory art under 35 U.S.C. § 102, thereby eliminating the need to consider the objective evidence of non-obviousness submitted by applicants. Accordingly, the Examiner suggested that applicants submit this response to the outstanding Office Action with additional declarations as applicants saw fit. The Examiner asserted, however, that a new rejection under 35 U.S.C. § 102 should be expected. Specifically, the Examiner asserted that the ProTalk UHF product described on the website for the EarTech company ([www.eartec.com](http://www.eartec.com)) anticipates the claimed subject matter. This response complies with the Examiner's guidance.

APPLICANTS' POSITION REGARDING THE EARTEC PRODUCTS

Applicants respectfully assert that no Eartec product anticipates the pending claims. Accordingly, applicants believe that a proper analysis of obviousness taking into consideration the secondary considerations under *Graham v. John Deere* will be required. Applicants have

investigated the Eartec company and its products and set forth their reasons for asserting that the Eartec products do not anticipate the claimed invention as follows.

Applicants submitted an Information Disclosure Statement on July 19, 2004, in which applicants disclosed an undated Eartec brochure. Prior to submitting the Eartec brochure, applicants contacted Eartec to determine if any of its products would be of particular concern. They determined that Eartec did not market any wireless headsets as that term is used in this application. Thus, applicants assert that any Eartec literature available prior to the filing date of this application does not disclose a wireless headset and applicants submit that the Eartec literature does not anticipate the pending claims.

In the telephone calls with the Examiner, the Examiner pointed specifically to the webpage describing the ProTalk UHF product available from Eartec ([www.eartec.com/protalk.html](http://www.eartec.com/protalk.html)).<sup>1</sup> Eartec markets specialty headset communications systems for applications including theatre, plant tours, videography, and church communications. The ProTalk UHF product is not a headset product — it is simply a Kenwood ProTalk XLS radio. The Kenwood ProTalk radio is a lightweight business band transceiver with an audio accessory port. Eartec markets the Kenwood ProTalk transceiver because it is compatible with Eartec headsets. The compatibility is that the Eartec headsets can be plugged into the audio accessory port on the Kenwood ProTalk transceiver. Eartec discloses no wireless communication between any headset and the ProTalk transceiver. Further, the Kenwood ProTalk transceiver includes no capability to communicate with a wireless headset. Accordingly, the ProTalk transceiver does not and cannot anticipate the pending claims.

Subsequent to the Examiner's assertions that the Eartec ProTalk webpage is anticipatory art to the pending claims, applicants' representatives again called Eartec to inquire about the operation of the Eartec headsets. The customer service representative at Eartec confirmed that all headsets marketed and sold by Eartec to date are wired headsets. Although, Eartec headsets maybe used with radios, all of Eartec's headsets must be connected to the radios by wires. Some Eartec systems using radios, such as the system using the ProTalk radio, include push-to-talk

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<sup>1</sup> The Examiner further asserted that he could demonstrate that the description of the ProTalk UHF product was published sufficiently early to qualify as prior art under 35 U.S.C. § 102(b). As applicants assert that ProTalk UHF product does not anticipate the pending claims, applicants have not addressed the critical date at which the ProTalk UHF description may have been published.

functionality. However, the customer service representative at Eartec confirmed that all push-to-talk buttons provided by Eartec are connected to the radio by a wire. Accordingly, no Eartec product anticipates applicants' pending claims.

The confusion regarding the operation of the Eartec headsets appears to arise due to two factors. The first is that, although all of the Eartec headsets are **wired headsets**, the wire is not pictured in the photographs of many of the headsets in Eartec's marketing materials and website. The second is that the Eartec refers both to wired and wireless systems. A wired system from Eartec is system, such as the "Drama Com Wired Intercom" in which all communication is through a wire. In such wired systems, users, such a directors, light operators, and stagehands in a theater are connected to each other through a wired intercom system. Such systems do not use radios at all. In contrast, a wireless system from Eartec is a system that uses portable radios. Eartec thus uses the term "push-to-talk wireless" to mean that the system uses radios (*i.e.* is wireless) that have push-to-talk button (as opposed to being either full duplex or having voice activated transmissions). The term "push-to-talk wireless" as used by Eartec does not teach or suggest a push-to-talk signal that is wirelessly transmitted to the radio. Indeed, wireless transmission of a push-to-talk signal from a wireless headset to a two-way radio cannot be found in Eartec's products or literature because Eartec does not make or describe wireless headsets at all.

The Examiner noted that the description of the features of the Eartec ProTalk system explicitly make statements including: "A variety of Push to Talk configurations also insure user friendly operation in the PTT mode" and a "Dual mode of headset operation, voice activated or ptt." However, the push-to-talk configurations include a wired pendant, a wired handle or wheel-mounted button, or a button placed in the wire from the headset to the radio. The variety of configurations available from Eartec does not include any push-to-talk button that is not connected to the radio by a wire. Accordingly, the Eartec push-to-talk configurations do not anticipate the claimed wireless push-to-talk headset configurations.

The Eartec product literature and website do not anticipate any of the pending claims. Independent claim 1 sets forth *a wireless headset for communicating to and from a half-duplex communications device . . . comprising . . . a switch and a transceiver adapted to wirelessly transmit a signal representative of an engagement of the switch to the half-duplex communications device, the signal for causing the half-duplex communications device to enter a*

*half-duplex transmission mode*. The Eartec website teaches no headset including a transceiver adapted to wirelessly transmit a signal for causing a device to enter a half-duplex transmission mode. To the contrary, all Eartec headsets are connected to communications devices by a wire. The Eartec website does not anticipate claim 1.

Independent claim 18 sets forth *an apparatus comprising . . . a transceiver adapted to receive signals from a wireless headset*. The Eartec website teaches no wireless headset and teaches no transceiver adapted to receive signals from a wireless headset. The Eartec website does not anticipate claim 18.

Independent claim 26 sets forth *a system comprising . . . a headset wirelessly connected to the half-duplex communications device*. The Eartec website does not teach a headset wirelessly connected to a communications device. The Eartec website does not anticipate claim 26.

Independent claim 34 sets forth *a system comprising . . . a transmit switch assembly wirelessly connected to the half-duplex communications device*. The Eartec website does not teach a transmit switch assembly wirelessly connected to a communications device. To the contrary, all the push-to-talk switch assemblies marketed by Eartec are connected to a communications device by a wire. The Eartec website does not anticipate claim 34.

For the above reasons applicants respectfully submit that a rejection under 35 U.S.C. § 102 based on the Eartec website would be improper. Accordingly, applicants request that the evidence of commercial success be fully considered by the Examiner.

#### **RESPONSE TO OFFICE ACTION**

Claims 1, 3-16, and 18-42 are pending in the application. The rejections set forth in the April Office Action are repeated in the recent Office Action. Claims 1, 3-5, 7-16, and 26-42 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent 5,101,504 issued to Veron C. Lenz (Lenz) in view of U.S. Patent 6,230,029 issued to Stan S. Hahn *et al.* (Hahn). Claim 6 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Lenz in view of Hahn and further in view of U.S. Patent Publication 2002/0057746 naming Chen as inventor (Chen). Claims 18-25 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Hahn in view of Lenz. The Office Action further includes a section titled "Response to Amendment," in which the rejections under 35 U.S.C. § 103(a) are generally supported. The declarations

submitted with applicants' Prior Response are addressed in this section of the Office Action. Applicants respectfully submit that the Examiner has not established a proper rejection under 35 U.S.C. § 103(a) for at least the following reasons.

In the Prior Response applicants argued that the rejections under 35 U.S.C. § 103 contained errors because 1) objective evidence of non-obviousness should be considered, 2) there is insufficient motivation to combine the teachings of the applied references in the manner suggested by the Examiner, and 3) that the applied references fail to show or suggest each limitation of every claim. "Where the applicant traverses any rejection, the examiner should, if he or she repeats the rejection, take note of the applicant's argument and answer the substance of it." M.P.E.P. § 707.07(f) (8<sup>th</sup> Ed. Rev. 3, 2005). The Examiner has acknowledged the declarations submitted to show objective evidence of non-obviousness. The Examiner, however, has not properly considered this evidence or applicants' arguments regarding how the evidence demonstrates that the claimed invention is non-obvious. The Examiner has failed to acknowledge or address the substance of applicants' arguments regarding the absence of a motivation to combine the applied references. The Examiner also has not acknowledged or addressed the substance of applicants' arguments that the applied references fail to teach each limitation of every pending claim. Applicants restate their arguments below and supplement those arguments with additional evidence of commercial success. The objective evidence of non-obviousness is supplemented to provide additional facts related to events that have occurred since the filing of the Prior Response. Applicants request that the following arguments be considered and that the Examiner address the substance of each argument as required by Office procedures. M.P.E.P. § 700.

SECONDARY CONSIDERATIONS DEMONSTRATE NONOBVIOUSNESS

As noted above, the Request for Continued Examination was filed primarily to provide the Examiner with an opportunity to consider the declarations of Anthony J. Sutera ("First Sutera Decl.") and D. Scott Miller ("Miller Decl."). These declarations demonstrate the success the inventors have had in establishing the Radeum corporation for the purpose of bringing the claimed subject matter to the marketplace and the success of Radeum's FreeMotion 200 product in the marketplace to date. Applicants submit herewith declarations of Anthony J. Sutera

(“Second Sutera Decl.”) and Randy Bailey (“Bailey Decl.”) setting forth further developments since the June 10, 2005 response relevant to the commercial success of the claimed invention.

Secondary considerations are relevant to patentability because many successful inventions appear obvious in hindsight.

Thus evidence rising out of the so-called “secondary considerations” must always when present be considered en route to a determination of obviousness. Indeed, evidence of secondary considerations may often be the most probative and cogent evidence in the record. It may often establish that an invention appearing to have been obvious in light of the prior art was not. It is to be considered as part of all the evidence, not just when the decisionmaker remains in doubt after reviewing the art.

*Statoflex, Inc. v. Aeroquip Corp.*, 713 F.2d 1530, 1540, 218 U.S.P.Q. 871, 879 (Fed. Cir. 1983) (internal citations omitted).

As the Examiner stated at the interview, the Office does not frequently consider evidence of secondary considerations. Of course, many patent applicants do not have evidence of commercial success to present to the Office.

In an appeal of a rejection of a patent application, secondary considerations, such as commercial success, typically do not play a large part in the analysis of obviousness because the inventor usually waits until his patent issues before he swings production into full gear. Thus, a detailed analysis of secondary considerations is more common in cases like *John Deere*, which involved infringement. If however, a patent applicant properly presents evidence relating to these secondary considerations, the board must always consider such evidence in connection with the determination of obviousness.

*In re Sernaker*, 217 U.S.P.Q. 1, 7 (Fed. Cir. 1983). Accordingly: “When evidence of any of these secondary considerations is submitted, the examiner must evaluate the evidence.”

M.P.E.P. § 2141 III. This does not mean that the submitted evidence should weighed against any *prima facie* case of obviousness previously set forth by the Examiner. To the contrary:

When *prima facie* obviousness is established and evidence is submitted in rebuttal, the decision-maker must start over.... An earlier decision should not, as it was here, be considered as set in concrete, and applicant's rebuttal evidence then be evaluated only on its knockdown ability. ... Facts established by rebuttal evidence



must be evaluated along with the facts on which the earlier conclusion was reached, not against the conclusion itself.

*Eli Lilly*, 902 F.2d 943, 14 U.S.P.Q.2d 1741, 1743 (Fed. Cir. 1990) (quoting *In re Piaseciki*, 745 F.2d 1468, 1472, 223 USPQ 785, 788 (Fed. Cir. 1984)). Secondary considerations “give light to the to the circumstances surrounding the origin of the subject matter sought to be patented.” *Graham v. John Deere*, 383 U.S. 1, 148 U.S.P.Q. 459 (1966). In this case, the circumstances surrounding the applicants’ inventions are that none of the well-established businesses in the industry with their substantial research, development, marketing and other resources conceived the claimed invention as shown by the fact that they failed to bring any such product to the market. Applicants have supplied evidence from numerous customers, with considerable knowledge of the relevant art, showing that no similar product previously existed in the marketplace. As applicants have presented evidence that the invention was not brought to the marketplace sooner, the Examiner should find that the invention was not obvious to persons skilled in the art. This is very essence of a showing of commercial success. “Commercial success is relevant because the law presumes an idea would successfully have been brought to market sooner, in response to market forces, had the idea been obvious to persons skilled in the art.” *Merck & Co. v. Teva Pharmaceuticals USA Inc.*, 73 U.S.P.Q.2d 1641, 1651 (Fed. Cir. 2005). That the inventors have filled a market niche that was not filled by those skilled in the art demonstrates that the inventor’s product was not obvious to those skilled in the art.

As noted above: “After a *prima facie* case of obviousness has been made and rebuttal evidence submitted, all the evidence must be considered anew.” *Eli Lilly*, U.S.P.Q. at 1743. To truly consider all the evidence anew, the Examiner must either 1) find some reason to explain why the claimed invention was not brought to market sooner or 2) conclude the invention is not obvious.

The case of obviousness set forth in the Office Action is identical to the case set forth by the Examiner prior to applicants’ submission of the declarations. The Office Action does include a Response to Arguments purporting to address the declarations. However, the Examiner has not responded to applicants’ arguments or considered all the evidence anew. To the contrary, the Examiner states, the “claimed languages and the invention itself render the obviousness,” (Office Action, p. 2.) and improperly asserts, without evidence, that the declarations are insufficient to overcome the rejections.

The Examiner dismisses the First Sutera Decl., by stating: “[T]he marketing, and demonstrating of the wireless headset to many agencies, and interest parties does not have a direct connection with claimed invention.” (Office Action, p. 2.) Applicants take issue with this statement for several reasons. First, the First Sutera declaration demonstrates far more than that the FreeMotion 200 wireless headset was marketed and demonstrated to many agencies and interested parties. The First Sutera declaration, now supplemented by the Second Sutera declaration, shows that the marketplace has reacted positively to the FreeMotion 200 wireless headset, that there is no other wireless headset available for use with half-duplex type portable radios, and that Radeum has sold and will continue to sell the FreeMotion 200 product. Unquestionably, the Sutera declarations show that Radeum has successfully raised capital and brought the FreeMotion 200 wireless headset to the marketplace. Second, the facts demonstrating Radeum’s success have a direct connection with the claimed invention. The First Sutera declaration sets forth the properties of the FreeMotion 200 product. (First Sutera Decl. para. 27.) The FreeMotion 200 includes a headset with an ear speaker, microphone, and a push-to-talk switch for controlling the transmit/receive function of two-way radios. These are the central features of the claimed inventions. For example, claim 1 sets forth a wireless headset including a speaker assembly, a microphone assembly, a switch, and a transceiver adapted to wirelessly transmit a signal for causing a half-duplex communications device to enter a half-duplex transmission mode. The First Sutera Decl. explains that The FreeMotion 200 product is the first product developed by Radeum and that the success of Radeum is directly related to this product. Applicants made these arguments at the interview where the Examiner and his supervisor acknowledged that the facts set forth in the First Sutera declaration do have a direct connection to claimed subject matter. Accordingly, applicants submit that any finding by the Examiner that the commercial success of Radeum is not directly derived from the claimed invention is erroneous for the above reasons.

It the Office Action, the Examiner acknowledges the Miller declaration. The Examiner notes that Miller sets forth that although many wireless headsets were available for communications devices, “None of these existing wireless headset products, however, operated a push to talk switch or was compatible with or could be used with two-way radios.” (Office Action, pp. 2-3 (quoting Millar Decl. p. 3-4).) The Examiner appears to cite this fact as evidence that it would be obvious to modify wireless headsets to be operable with two-way radios. The

Examiner does not explain why the failure of existing products to include the features of the claimed invention supports the Examiner's conclusion of obviousness. In fact, the failure of the existing businesses in the industry to bring such a product to the market place demonstrates that *they had not conceived of the idea*. They had not conceived of the idea because the invention is not obvious to those of skill in the art.

The Second Sutera Declaration and Bailey Declaration provide further evidence of the commercial success of the claimed invention. The Second Sutera Decl. details additional funding of the corporation, the status of Radeum's production of the FreeMotion 200 product, status of sales and field testing of the FreeMotion 200 product, and the interest and feedback from the marketplace. The Bailey Decl. attaches various testimonials from customers and potential customers of the FreeMotion 200 product which demonstrate that a wireless headset product for use with two-way radios did not exist in the marketplace prior to Radeum's introduction of the FreeMotion 200 product.

The Examiner must consider the declarations submitted by applicants and address applicants showing of commercial success. The declarations demonstrate that the inventors have successfully established Radeum as a business based on the claimed invention. Radeum has attracted in excess of \$2,000,000 in capital and has begun production and distribution of the FreeMotion 200 embodiment of the claimed invention. (Second Sutera Decl. para 16.) Numerous customers have indicated a desire to purchase significant quantities of the FreeMotion 200 upon production of sufficient quantities. (First Sutera Decl. paras. 21-25; Second Sutera Decl. paras. 12-14.) Furthermore, the FreeMotion 200 product has received significant praise and awards. (Second Sutera Decl, paras. 10-11.) Applicants submit that these results would not have been possible had the invention been obvious to one of ordinary skill in the art. The declarations further demonstrate that there is a substantial market for the claimed subject matter that has not been fulfilled by those of skill in the art. There is no evidence, that prior to applicants' invention of the claimed invention, of any wireless headsets with push-to-talk switches. Numerous customers have indicated to Radeum that they are extremely interested in the FreeMotion 200 product and have not seen any similar products on the market. (Bailey Decl.) Applicants submit that had the invention been obvious, this interest by Radeum's customers would have been satisfied prior to the inventors conceiving the invention and bringing their product to market by starting the Radeum corporation.

The Examiner concludes:

With the current technology, one skilled in the art could easily modify [the primary reference] Lenz's invention by making a wired headset to be a wireless headset in communication with a two-way radio.

(Office Action, p. 3.) The Examiner does not explain why, if those skilled in the art could easily have arrived at applicants' claimed subject matter, those of skill in the art did not in fact produce a wireless headset in communication with a two-way radio. Applicants' declarations demonstrate that there is profit to be had by bringing the claimed invention to the marketplace. The Examiner has failed to consider why the claimed subject matter was not earlier brought to the marketplace.

The declarations submitted by applicants, when viewed in combination with the applied art, demonstrate that the claimed invention is non-obvious. The Examiner must consider the evidence regarding obviousness anew. The rejections under 35 U.S.C. § 103 cannot be sustained in view of this evidence. Applicants request that the rejections of the pending claims under 35 U.S.C. § 103 be withdrawn for the above reasons.

NO MOTIVATION TO COMBINE REFERENCES

In addition to presenting objective evidence of non-obviousness, applicants in the Prior Response pointed out certain errors in the Examiner's *prima facie* case of obviousness. One such error is that the Examiner fails to identify sufficient motivation to combine the references to arrive at the claimed subject matter. Applicants reiterate this argument. Independent claims 1, 26, and 34 stand rejected as being unpatentable over Lenz in view of Hahn. Independent claim 18 stands rejected as being unpatentable over Hahn in view of Lenz. When combining references to establish obviousness "[t]he references must be considered as a whole and must suggest the desirability and thus the obviousness of making the combination." M.P.E.P. § 2141 (8<sup>th</sup> Ed. Rev. 2, 2004) (citing *Hodosh v. Block Drug Co.* 786 F.2d 1136, 1143 n. 5, 229 U.S.P.Q. 182, 187 n. 5 (Fed. Cir. 1986)). "The references must be viewed without the benefit of impermissible hindsight vision afforded by the claimed invention." *Id.* "The examiner bears the initial burden of factually supporting any *prima facie* conclusion of obviousness." M.P.E.P. § 2142. As demonstrated below, the Examiner has not met this burden. The references do not

suggest the desirability and thus the obviousness of making the combination suggested by the Examiner.

The Examiner has not addressed applicants' assertions that insufficient motivation or suggestion to combine the teachings of the applied art was available to one of ordinary skill in the art. This is abundantly clear as applicants pointed out that the Examiner identified no motivation or suggestion whatsoever to modify the teachings of Hahn with the teachings of Lenz as presented in the rejection of claim 18. In response, the Examiner has repeated verbatim the rejection of claim 18 based on Hahn in view Lenz. The Examiner makes no attempt to point to any motivation or suggestion to combine the applied teachings to arrive at the claimed subject matter.

As noted in the Prior Response, with respect to claims 1, 26, and 34, the Examiner asserts that it would have been obvious to use a wireless headset (of Hahn) instead of a wired headset (of Lenz) because the wired headset might entangle users. "Obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either explicitly or implicitly in the references themselves or in the knowledge generally available to one of ordinary skill in the art." M.P.E.P. § 2143.01. First, the applied art does not address the "entanglement" issue identified by the Examiner. Hahn is silent regarding entanglement. Lenz also includes no teaching that the cord disclosed might entangle a user. Accordingly, the prior art does not suggest the combination assembled by the Examiner. The Examiner has merely used applicants' invention as a template to assemble the features of the claimed invention and, then in hindsight, has created a motivation to combine the selected teachings. Such hindsight reasoning is improper. *In re Fritch*, 972 F.2d 1260, 23 U.S.P.Q.2d 1780, 1784 (Fed. Cir. 1992).

Furthermore, the motivation provided by the Examiner does not address the transmit mode signal of applicants' claims. One of ordinary skill in the art motivated to avoid entanglement in wires would not necessarily arrive at the claimed subject matter. Rather, one skilled in the art so motivated might produce a wireless headset with the push-to-talk switch on the radio rather than the headset. There is no teaching in Lenz to transmit any signal from the described headset wirelessly. There is also no teaching in Hahn to transmit any control signals from a headset wirelessly. Accordingly, there is no suggestion that the wireless system of Hahn, which is silent regarding any control signals, is compatible with the Lenz device, which includes

a push-to-talk button. For at least these reasons, the Examiner has not set forth a sufficient motivation or suggestion to combine the references in a manner that arrives at the claimed invention.

RESPONSE TO CLAIM REJECTIONS

Applicants have demonstrated above why all the outstanding rejections under 35 U.S.C. § 103 should be withdrawn in light of applicants' showing of commercial success. The rejections should also be withdrawn the Examiner failed to point out a sufficient motivation to combine the applied references for the reasons set forth above. In addition to the above arguments demonstrating the errors in the applied rejections, applicants make the following arguments with respect to specific claims.

a. Claim 1

Claim 1 sets forth a transceiver adapted to wirelessly transmit a signal representative of an engagement of a switch to a half-duplex communications device. Claim 1 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Lenz in view of Hahn. Neither Lenz nor Hahn show or suggest such a transceiver. The Examiner cites to Lenz to show a transceiver, but acknowledges that Lenz does not operate wirelessly. Office Action, p. 4. The Examiner relies on Hahn to show wireless operation. For the reasons set for in the Prior Response, applicants maintain that this rejection is improper. The Examiner has not properly considered the objective evidence of non-obviousness submitted by applicants as discussed above. The Examiner has not identified a motivation or suggestion to combine the references from the knowledge of one of skill in the art for the reasons discussed above. Accordingly, applicants request the withdrawal of the rejection of claim 1 under 35 U.S.C. § 103(a).

b. Claims 3-5 and 7-16

Claims 3-5 and 7-16 depend from claim 1. Claims 3-5 and 7-16 stand rejected as being unpatentable over Lenz in view of Hahn. Dependent claims are nonobvious under Section 103 if the independent claims from which they depend are nonobvious. *In re Fine*, 837 F.2d 1071, 5 U.S.P.Q.2d 1596, 1600 (Fed. Cir. 1988). Accordingly, claims 3-5 and 7-16 are patentable over Lenz in view of Hahn for the reasons set forth above.

In addition, claim 3 sets forth that the switch is positioned on the microphone assembly. In the Prior Response, applicants pointed out that Lenz does not teach or suggest a switch

positioned on the microphone assembly. “The switch is mounted on the earphone.” Lenz, col. 2, l. 56. The Office Action does not address this teaching of Lenz.

Claim 5 sets forth that at least a portion of audio information from the user is transmitted as packetized digital information. The Examiner asserts, “it is well known in the art that the audio information from the user is transmitted as packetized digital information because the headset is the wireless headset.” Office Action, p. 5. As explained in the Prior Response, this assertion is insufficient to establish a *prima facie* case of obviousness. “To establish a *prima facie* obviousness of a claimed invention, all the claim limitations must be taught by the prior art.” M.P.E.P. § 2143 (citing *In re Royka*, 490 F.2d 981, 180 U.S.P.Q. 580 (C.C.P.A. 1974)). The Examiner cites to no teaching in prior art regarding the limitations of claim 5 and, thus, has failed to establish a *prima facie* case of obviousness.

Claim 7 sets forth that the speaker assembly includes an earbud speaker. Claim 9 sets forth that the speaker assembly includes an ear insert for insertion into the user’s ear canal. Claim 10 sets forth that the ear insert comprises a conformable material. The Examiner asserts that these limitations are “well known in the art since [they are] just variation[s] in design or style of wireless headsets.” Office Action, p. 5. In the Prior Response, applicants noted that it is unclear whether or not the Examiner is asserted that these limitations are mere aesthetic design changes. The Office Action does not clarify the Examiner’s position. Applicants submit that these limitations have a clear mechanical function and that the Examiner has not identified these limitations in the prior art. Accordingly, the Examiner has failed to set forth a *prima facie* case of obviousness against these claims.

Claim 11 depends from claim 9 and sets forth that the switch is positioned substantially coaxially with the ear insert. The Examiner asserts, “Lenz further discloses the switch positioned substantially coaxially with the ear insert.” Office Action, p. 5. As noted in the Prior Response, Lenz does not show or suggest an ear insert. As Lenz does not teach an ear insert, Lenz does not show or suggest a switch that is positioned substantially coaxially with an ear insert. The Office Action does not identify an ear insert in the teachings of Lenz.

Claim 15 sets forth that the signal representative of an engagement of the switch includes a signal transmitted during at least a portion of a period that the switch is engaged. Lenz discloses at column 2, lines 28-30, “When the wearer wishes to transmit, he must activate a ‘push-to-talk’ switch 24.” The Examiner relies on this sentence to show the limitations of claim

15. Office Action, p. 6. As noted in the Prior Response, Lenz merely discloses the switch is engaged. Lenz does not show or suggest that a signal is transmitted during the period that the switch is engaged.

Claim 16 sets forth that the signal representative of an engagement of the switch includes an absence of a signal during at least a portion of a period that the switch is engaged. The Examiner acknowledges the applied prior art is silent regarding these limitations. Office Action, p. 6. The Examiner asserts, “there must be a gap between the transmit mode and the receive mode.” Office Action p. 6. As noted in the Prior Response, there is no suggestion in the prior art of such a gap. Even if there was such a gap, there is no suggestion that such a gap would be an absence of a signal during a period that the switch is engaged as set forth by claim 16.

For the above reasons, applicants respectfully submit that claims 3-5 and 7-16 are patentable over Lenz in view of Hahn. Applicants request that the rejections of claims 3-5 and 7-16 be withdrawn.

c. Claim 26

Claim 26 sets forth a system including a half-duplex communications device and a wireless headset. Claim 26 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Lenz in view of Hahn. Claim 26 sets forth that the headset is adapted to wirelessly transmit a transmit mode signal for reception by the half-duplex communications device, the transmit mode signal causing the half-duplex communications device to enter a half-duplex transmission mode.

For the reasons set for in the Prior Response, applicants maintain that this rejection is improper. The Examiner has not properly considered the objective evidence of non-obviousness submitted by applicants as discussed above. The Examiner has not identified a motivation or suggestion to combine the references from the knowledge of one of skill in the art for the reasons discussed above. Applicants request the withdrawal of the rejection of claim 26 under 35 U.S.C. § 103(a).

d. Claims 27-33

Claims 27-33 depend from claim 26. Claims 27-33 stand rejected as being unpatentable over Lenz in view of Hahn. Dependent claims are nonobvious under Section 103 if the independent claims from which they depend are nonobvious. *In re Fine*, 837 F.2d 1071, 5



U.S.P.Q.2d 1596, 1600 (Fed. Cir. 1988). Accordingly, claims 27-33 are patentable over Lenz in view of Hahn for the reasons set forth above.

In addition, claim 28 sets forth that the transmit mode signal includes a signal transmitted during at least a portion of a period that the switch is engaged. Lenz discloses at column 2, lines 28-30, "When the wearer wishes to transmit, he must activate a 'push-to-talk' switch 24." The Examiner relies on this sentence to show the limitations of claim 15. Office Action, p. 8. As noted in the Prior Response, Lenz merely discloses the switch is engaged. Lenz does not show or suggest that a signal transmitted during the period that the switch is engaged.

Claims 29 sets forth that the transmit mode signal includes an absence of a signal during at least a portion of a period that the switch is engaged. The Examiner acknowledges the applied prior art is silent regarding these limitations. Office Action, p. 8. The Examiner asserts, "there must be a gap between the transmit mode and the receive mode." Office Action p. 8. As noted in the Prior Response, there is no suggestion in the prior art of such a gap. Even if there was such a gap, there is no suggestion that such a gap would be an absence of a signal during a period that the switch is engaged as set forth by claim 29.

Claim 32 sets forth that audio information from the headset and audio information from the half-duplex communications device is transmitted as packetized digital information. The Examiner asserts, "it is well known in the art that the audio information from the user is transmitted as packetized digital information because the headset is the wireless headset." Office Action, p. 7. As explained in the prior art, this assertion is insufficient to establish a *prima facie* case of obviousness against claim 32. The Examiner cites to no teaching in prior art regarding the limitations of claim 32.

For the above reasons, applicants respectfully submit that claims 27-33 are patentable over Lenz in view of Hahn. Applicants request that the rejections of claims 27-33 be withdrawn.

e. Claim 34

Claim 34 sets forth a system including a half-duplex communications device, a headset, and a transmit switch assembly. Claim 34 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Lenz in view of Hahn.

Claim 34 sets forth both a transmit switch assembly wirelessly connected to a half-duplex communications device and a headset wirelessly connected to the half-duplex communications

device. In the Prior Response, applicants fully explained that the transmit switch assembly is a distinct element of claim 34. Lenz does not show or suggest a separate transmit switch assembly connected to the half-duplex communications device. As the improperly Examiner relies on Lenz to show both a transmit switch assembly and a wireless headset, the Examiner has failed to set forth a *prima facie* case of obviousness against claim 34. As applicants explained in the Prior Response, the shoulder actuation feature is central to the Lenz system and incompatible with a separate transmit switch assembly.

Claim 34 sets forth that the transmit switch assembly is adapted to wirelessly transmit a transmit mode signal for reception by the half-duplex communications device, the transmit mode signal causing the half-duplex communications device to enter a half-duplex transmission mode. As Lenz does not teach or suggest a transmit switch assembly, Lenz cannot teach or suggest both a headset and a transmit switch assembly where the transmit switch assembly is adapted to transmit a transmit mode signal for reception by a half-duplex communications device. For this reason, the Examiner has not established a *prima facie* case of obviousness against claim 34.

For the reasons set for in the Prior Response, applicants maintain that this rejection is improper. The Examiner has not properly considered the objective evidence of non-obviousness submitted by applicants as discussed above. The Examiner has not identified a motivation or suggestion to combine the references from the knowledge of one of skill in the art for the reasons discussed above. Accordingly, the rejection based on the combination of the teachings of Lenz with the teachings of Hahn is improper.

Applicants respectfully submit that the Examiner has not established a *prima facie* case of obviousness against claim 34 for at least the above reasons. Applicants request that the rejection of claim 34 as unpatentable over Lenz in view of Hahn be withdrawn.

f. Claims 35-39

Claims 35-39 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Lenz in view of Hahn. Claims 35-39 are similar to claims 27-31 respectively but for depending from claim 34. Claims 35-39 are patentable over Lenz in view of Hahn for the reasons set forth above with respect to claims 34 and 27-31. Applicants respectfully request that the rejections of claims 35-39 be withdrawn for these reasons.

g. Claim 18

Claim 18 is directed to an adapter for a two-way radio that transmits information to and receives information from a wireless headset. This accessory permits a wireless headset to be used with existing half-duplex communications devices. The applied art teaches no such adapter. Claim 18 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Hahn in view Lenz. Claim 18 sets forth an apparatus that includes a processor connected to a transceiver for receiving a first transmit mode signal indicating engagement of a switch. The processor is also connected to an interface for providing a second transmit mode signal to a half-duplex communications device. The Examiner acknowledges neither of the applied references, Hahn or Lenz, discloses such a processor. Office Action, p. 13. As the applied art does not suggest a processor as set forth by claim 18, the Examiner has not set forth a *prima facie* case of obviousness against claim 18.

The Examiner relies on Lenz to suggest a transceiver for receiving a transmit mode signal. Office Action, p. 13. As pointed out in the Prior Response, Lenz does not disclose any such transceiver. Lenz is directed to a wired headset for use with a two-way radio. Lenz col. 2, ll. 19-24. Lenz discloses no details of the two-way radio, except to say that the radio is not duplex and, thus, when the wearer wishes to transmit, he must activate a push-to-talk switch. Lenz, col. 2, ll. 24-30. As Lenz is a wired device, no transceiver is required.

The Examiner asserts, “Even though Lenz does not disclose a processor connected to the transceiver, but [sic] it is well known in the art that the processor must be in place to process the information.” Office Action, p. 13. This conclusion is not supported by the prior art and is based on the Examiner’s unsupported and erroneous assertion that Lenz discloses a transceiver. Lenz discloses a *wired* push-to-talk switch. There is no suggestion in the prior art that a processor must be in place to process information from a wired switch. The Examiner asserts, “it would have been obvious to one of ordinary skill in the art at the time the invention was made to include the processor in order for the apparatus to function properly.” Office Action, p. 13. The Examiner does not explain why a wired switch requires a processor to operate properly. Lenz does not show or suggest a processor, and the Examiner offers no suggestion or motivation to include a processor in the Lenz device.

For the reasons set for in the Prior Response, applicants maintain that this rejection is improper. The Examiner has not properly considered the objective evidence of non-obviousness submitted by applicants as discussed above. The Examiner has not identified a motivation or suggestion to combine the references from the knowledge of one of skill in the art for the reasons discussed above. Applicants respectfully submit that Hahn in view of Lenz does not render claim 18 obvious for the above reasons. Applicants request the withdrawal of the rejection of claim 18 under 35 U.S.C. § 103(a).

h. Claims 19-25

Claims 19-25 depend from claim 18. Claims 19-25 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Hahn in view of Lenz. Dependent claims are nonobvious under Section 103 if the independent claims from which they depend are nonobvious. *In re Fine*, 837 F.2d 1071, 5 U.S.P.Q.2d 1596, 1600 (Fed. Cir. 1988). Accordingly, claims 19-25 are patentable over Hahn in view of Lenz for the reasons set forth above.

In addition, claim 23 sets forth that the first transmit mode signal is received from a wireless transmit switch assembly. As noted in the Prior Response, neither Hahn nor Lenz teach a wireless transmit switch assembly. The Examiner asserts that Lenz discloses that a transmit mode signal is received from a transmit switch assembly. The Examiner does not identify a transmit switch assembly in the disclosure of Lenz. Lenz discloses a switch 24 that is a part of headset assembly 10. Lenz, Fig. 1. There is no suggestion in Lenz of a wireless switch assembly.

For the above reasons, applicants respectfully submit that claims 19-25 are patentable over Hahn in view of Lenz. Applicants request that the rejections of claims 19-25 be withdrawn.

i. Claim 6

Claim 6 depends from claim 1. Claim 6 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Lenz in view of Hahn and further in view of Chen. Dependent claims are nonobvious under Section 103 if the independent claims from which they depend are nonobvious. *In re Fine*, 837 F.2d 1071, 5 U.S.P.Q.2d 1596, 1600 (Fed. Cir. 1988). Lenz and Hahn do not show or suggest every limitation of claim 1. The Examiner does not suggest that Chen corrects for these deficiencies of Lenz and Hahn discussed above (and Chen does not).

For at least this reason, the Examiner has not demonstrated a *prima facie* case of obviousness against claim 6. Applicants respectfully request that this rejection of claim 6 be withdrawn.

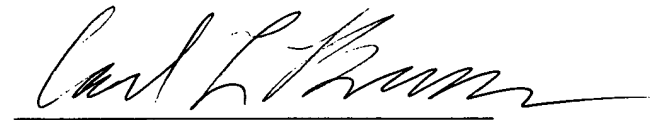
**CONCLUSION**

The Office Action, references, and rejections have been duly considered by the applicants and addressed by the foregoing remarks. The Examiner has failed to consider objective evidence of non-obviousness and has not responded to applicants' prior arguments regarding the rejections. Accordingly, the Examiner has failed to demonstrate that the pending claims are obvious over the applied art. Applicants further submit that the prior art does not teach or suggest a wireless headset that transmits a signal that controls a half-duplex push-to-talk mechanism. Reconsideration of the application and withdrawal of the outstanding rejections are respectfully solicited in light of the above remarks. Should the Examiner require resolution of any issues, the Examiner is invited to contact the undersigned to expedite the prosecution of this application.

Respectfully submitted,

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